

Instructions For Use

A00002-IFU-IVD

Rev. Date: June 1, 2017

Revision: 2

Page 1 of 2

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Actin, α-Smooth Muscle; Clone 1A4 (Ready-To-Use)

Availability/Contents: <u>Item #</u> <u>Volume</u>

 A00002-0002
 2 ml

 A00002-0007
 7 ml

 A00002-0025
 25 ml

Description:

Species: Mouse

Immunogen: N-terminal decapeptide of alpha smooth muscle isoform of actin and conjugated to KLH.

Clone: 1A4

Isotype: IgG2a, kappa Entrez Gene ID: 59 (Human) Hu Chromosome Loc.: 10q23.31

Synonyms: ACTA2, Actin Alpha 2 Smooth Muscle Aorta, Actin Aortic Smooth Muscle, Actin Vascular

Smooth Muscle, ACTSA, ACTVS, Alpha 2 Actin, Alpha Actin 2, Alpha Cardiac Actin, Alpha Smooth Muscle, Alpha-actin-2, Aortic Smooth Muscle, ASMA, Cell Growth-inhibiting Gene 46

Protein, Growth Inhibiting Gene 46

Mol. Weight of Antigen: 42kDa

Format: This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-

embedded as well as acetone fixed cryostat tissue sections. No further titration is required.

Specificity: This MAb is highly specific to actin from smooth muscles. Its epitope lies in the first four N-

terminal amino acids. This MAb does not stain cardiac or skeletal muscle; however, it does stain myofibroblasts and myoepithelial cells. In most cases of rhabdomyosarcoma, this antibody

yields negative results whereas anti-muscle specific actin and myogenin are positive.

Leiomyosarcomas are positive only with anti-muscle specific actin and anti-smooth muscle actin

and are negative with anti-myogenin.

Background: Actin is a major component of the cytoskeleton and is present in most cell types. This antibody

could be used together with anti-muscle specific actin and myogenin in making a diagnosis of

smooth muscle and skeletal muscle tumors.

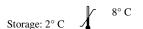
Species Reactivity: Human, Baboon, Monkey, Cow, Pig, Sheep, Goat, Cat, Dog, Rabbit, Mouse, Rat, Guinea Pig

and Chicken. Others not known.

Positive Control: Blood vessels in all tissues, smooth muscle or leiomyosarcoma.

Cellular Localization: Cytoplasmic

Titer/ Working Dilution: No further dilution is required. Microbiological State: This product is not sterile.









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Page 2 of 2

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Uses/Limitations: Not to be taken internally.

For In Vitro Diagnostic Use.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

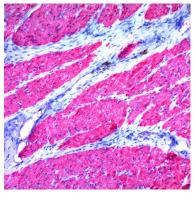
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



FFPE Uterus stained with Actin, Smooth Muscle; Clone 1A4. 200X magnification.

Procedure:

- 1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature.
 However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).

Do not pipette by mouth.

Avoid contact of reagents and specimens with skin and mucous membranes.

Avoid microbial contamination of reagents or increased nonspecific staining may occur.

This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200,

OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

- 1. Pierini A, Cinti F, Binanti D, Pisani G. Primary leiomyosarcoma of the jugular vein in a dog. Open Veterinary Journal. 2017;7(1):61-4.
- 2. Altinay S, Kusaslan R. Gastrointestinal autonomic nerve tumour of jejunum presenting as a perfore mass. JOURNAL OF THE PAKISTAN MEDICAL ASSOCIATION. 2014 Apr 1;64(4):461-4.
- 3. De Lisio M, Boppart MD, Huntsman HD, Zachwieja N, Zou K, Ripchik P, Valero MC. Mesenchymal stem cells contribute to vascular growth in. Am J Physiol Heart Circ Physiol. 2013;304:H72-81.

Warranty:

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